

Dust Control Methods



The following are suggested dust control methods that may be used to control fugitive dust from the sources listed. **Please note:** *The owner or operator is responsible for determining the number and frequency of necessary dust control methods to prevent particulate matter from becoming airborne.* For more information, consult *Nye County Ordinance No. 289*, or pick up a copy of the *Nye County Dust Management Handbook* for the Pahrump Regional Planning District at the Nye County Planning Department, Pahrump, Nevada.

Why Do We Need to Keep Dust Down?

Particulate Matter is hazardous to human health. Elevated levels can result in aggravated respiratory and heart disease, reduced lung function, lower immune systems, heart attacks, and even premature death.

Ambient air monitors documented unhealthy levels of Particulate Matter measuring less than 10 microns in diameter. If the Pahrump Valley Area does not control emissions of particulate matter it could become designated as a “non-attainment” area, which could result in stricter Federal rules, higher fines for dust violations, and lost of Federal funding. Please do your part to keep dust down.

The use of more than one method may be necessary.

Land Clearing and Earthmoving Activities

Control Method	Description
Watering	<ol style="list-style-type: none">1. Application of water by means of trucks, hoses, and/or sprinklers at sufficient frequency and quantity prior to conducting, during, and after earthmoving operation.2. Pre-application of water to the depth of the proposed cuts or equipment penetration.
Pre-grading planning	<ol style="list-style-type: none">1. Grade each phase separately and time to coincide with the construction phase.2. Grade entire project but apply chemical stabilizers or ground cover to graded areas where construction is scheduled to begin more than 60 days after grading is complete.
Chemical stabilizers	<ol style="list-style-type: none">1. Most effective in areas that are not subject to daily disturbances.2. Apply per manufacturer’s recommendations.
Wind fencing	<ol style="list-style-type: none">1. Three to five foot barriers with 50% or less porosity, adjacent to roadways or urban areas.2. Normally used in conjunction with watering or chemical stabilization.3. Use trees and shrubs for long-term sites.
Operate on-road haul vehicles appropriately	<ol style="list-style-type: none">1. Cover entire surface of hauled material once vehicle is full.2. Mix material with water prior to loading, and/or to entire surface of material after loading.3. Do not overload haul vehicle. Freeboard should not be less than 3”.4. Remove spillage from body of truck before/after loading or unloading.5. Empty loader slowly and keep bucket within 12 inches of the truck while dumping.6. Apply water as necessary during loading operation.
Operate off-road haul vehicles appropriately	<ol style="list-style-type: none">1. Mix material with water prior to loading, and/or to entire surface of material after loading.2. Empty loader slowly and keep bucket within 12 inches of the truck while dumping.3. Apply water as necessary during loading operation.
Alternative haul vehicles	Use bottom-dumping haul vehicles.
During periods of high winds	<ol style="list-style-type: none">1. Apply chemical stabilizers per manufacturer’s directions, and prior to expected wind events.2. Apply water as necessary.3. Stop work activities except for watering disturbed areas.

Storage Piles

Control Method	Description
Watering	<ol style="list-style-type: none">1. Application methods include spray bars, hoses, and water trucks.2. Frequency of application will vary with site-specific conditions.
Wind sheltering	Install three-sided barriers, with no more than 50% porosity, equal to material height.
Chemical stabilizers	Best for use on storage piles subject to infrequent disturbances.
Altering loading and unloading procedures	<ol style="list-style-type: none">1. Confine loading and unloading procedures to the downwind side of storage piles.2. May need to be used in conjunction with wind sheltering.
Coverings	<ol style="list-style-type: none">1. Tarps, plastic, or other material can be used as a temporary covering.2. When used, coverings must be anchored to prevent wind from removing them.
During periods of high winds	<ol style="list-style-type: none">1. Apply chemical stabilizers per manufacturer’s directions, and prior to expected wind events.2. Apply water as necessary, and prior to expected wind events.3. Install temporary covers.

Disturbed Surface Areas or Inactive Construction Sites

Control Method	Description
Chemical stabilization	1. Most effective when used on areas where active operations have ceased. 2. Apply per manufacturer's recommendations.
Watering	Apply at sufficient frequency and quantity to develop a surface crust.
Wind fencing	1. Three to five foot barriers with 50% or less porosity located adjacent to roadways or urban areas. 2. Normally used in conjunction with watering or chemical stabilization.
Vegetation	Establish as quickly as possible when active operations have ceased.
Prevent Access	1. Install fencing around the perimeter of property. 2. Install "No Trespassing" signs.
Site access improvements	Stay on established routes.
During periods of high winds	1. Apply chemical stabilizers per manufacturer's directions, and prior to expected wind events. 2. Apply water as necessary, and prior to expected wind events.

Unpaved Roads and Shoulders

Control Method	Description
Paving or chip sealing	Requires routine street sweeping if subject to material accumulation.
Chemical stabilization	1. Not recommended for high volume or heavy equipment traffic use. 2. Apply per manufacturer's recommendations.
Watering	1. Need sufficient quantities to keep the surface moist. 2. Required application frequency will vary according to soil type, weather conditions, and amount of vehicle traffic.
Reduce speed	May need to slow vehicles down to prevent dust generation.
Eliminate Unnecessary travel	1. Restrict access or redirect traffic to reduce vehicle traffic. 2. Reduce vehicle traffic speeds.
Gravel/Recycled Asphalt	Maintained to a size and depth effective in controlling dust.
Location	Locate haul roads as far from existing housing as possible.
Site access improvements	Stay on established routes.
During periods of high winds	1. Apply chemical stabilizers per manufacturer's directions, and prior to expected wind events. 2. Apply water as necessary, and prior to expected wind events. 3. Stop work and vehicle activity. Continue dust control measures.

Paved Road Track-Out

Control Method	Description
Site access improvements	1. Install a gravel pad or grizzly at the access point to your site. 2. Designate a single site entrance and exit. 3. Stay on established routes.
Wheel washers	1. Should be placed where vehicles exit unpaved areas onto paved areas. 2. May be adjusted to spray entire vehicle including bulk-stored material in haul vehicles.
Clean roadways	1. Use a street sweeper. 2. Use a high pressure washer to remove residual dust from the road.
During periods of high winds	1. Reduce traffic and traffic speed. 2. Clean streets with water flushing or street sweepers.

Thank You for Keeping Our Air Healthy to Breathe!

Questions? Call:

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<http://ndep.nv.gov/baqp/pahrump.html>

